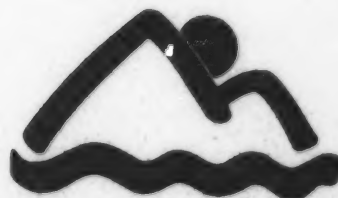


Tire Talk

Results and Findings



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Tire Talk

Results and Findings

**Municipal Waste Branch
Environmental Protection Division
BC Environment
Ministry of Environment, Lands and Parks
February 1992**

**Prepared by:
The Coopers and Lybrand Consulting Group**



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RESULTS AND FINDINGS****TABLE OF CONTENTS**

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FIGURE 1

Locations of Presentations Held During Tire Talk



EXECUTIVE SUMMARY

The Tire Talk project has achieved considerable success in promoting the Financial Incentives to Recycle Scrap Tires (FIRST) program and educating tire generators, local governments and the public about the objectives and approach of FIRST.

The FIRST program was implemented in June 1991 by the Municipal Waste Branch of the Ministry of Environment, Lands and Parks. FIRST's objectives are to recycle more than 90% of the total number of scrap tires in the province and to make a contribution to the overall target of a 50% reduction in municipal solid waste requiring disposal, by the year 2000. The Tire Talk project was initiated in September 1991, when it became apparent that FIRST was not well understood by some key participants who perceived problems with the program. The purpose of TIRE TALK was to tour the province and to promote FIRST, to inform tire generators, local governments and the public about its objectives, purpose and operation, and to listen and respond to their concerns.

APPROACH

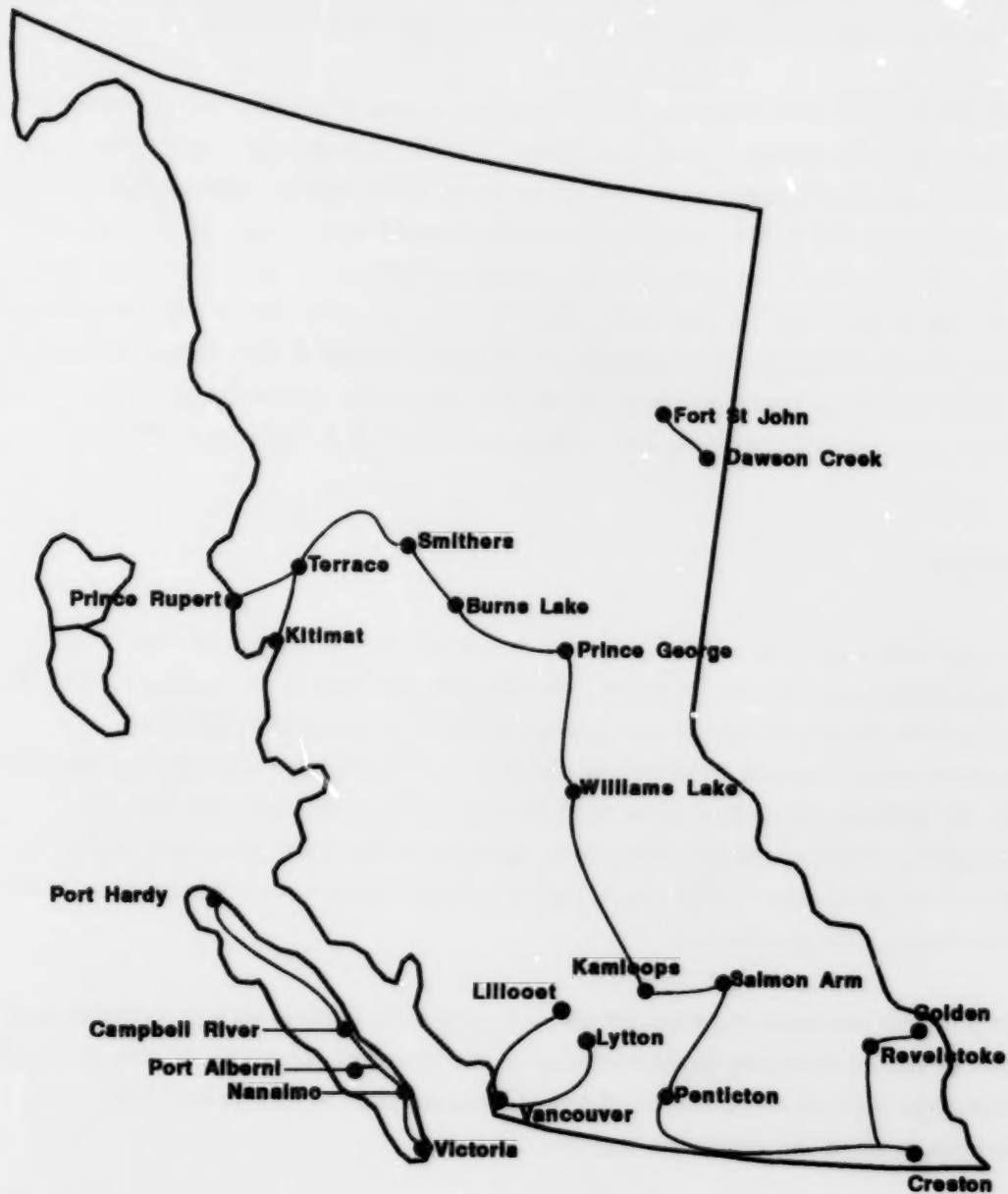
To address these concerns, a Tire Talk team was assembled consisting of staff from B.C. Environment, Lands and Parks and The Coopers & Lybrand Consulting Group. In the two months between October and December 1991, 21 tire generator/public presentations were conducted throughout the province which were attended by over 400 people. In addition, 13 presentations were made to local government officials and Ministry staff in regional offices. Also, four members of the team personally visited or telephoned tire generators. (The maps, Figures 1 and 2 show where presentations were held and visits to tire generators).

A questionnaire was used to gather information about the participant's perceptions and experiences before and after implementation of the program. In total, 385 tire generator questionnaires were received and tabulated. Questionnaires were received from respondents in all of the province's regional districts.

It should be remembered that responses to the Tire Talk questionnaire are based on participants experience of the program after five months of operation.

FIGURE 2

**Highways Travelled and
Presentations/Interviews Conducted**



This report contains a summary of the tabulated questionnaires and anecdotal information collected during the presentations. The report identifies and discusses several key issues facing the program and provides an action plan for dealing with them. The appendix contains an analysis of the questionnaire findings.

ACHIEVEMENTS

Two very important achievements were made by the Tire Talk team:

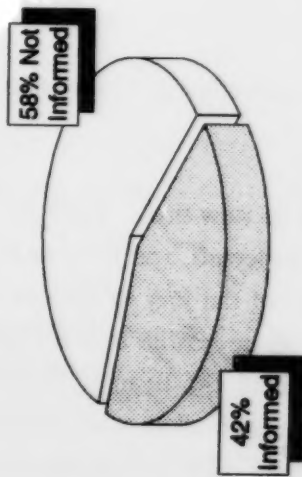
- it achieved considerable success in raising the level of understanding of the program amongst the participants, local government officials and the public. Ninety four percent of tire generators reported that the presentations were effective in helping them understand the program (See Figure 3); and
- it brought key participants together, such as municipalities, regional districts, haulers and retailers to discuss the scrap tire problem and thereby to gain a mutual understanding of each others problems. We feel the forging of these key relationships will help ensure the continued success of the program.

ISSUES

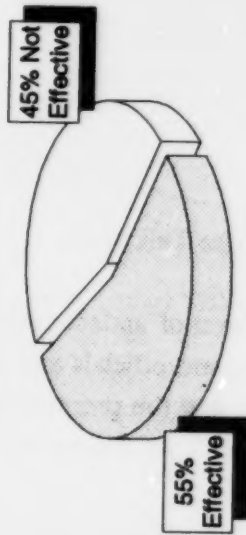
A number of important issues were voiced by local government representatives, tire generators and the public during the tour:

- many retailers complained about the \$3 levy on new tires. They did not know what it was for, how much money has been collected, and they were upset by sometimes having to pay a tipping fee on top of the levy to dispose of tires. This opposition to the levy caused some retailers to be hostile to the FIRST program when it was implemented. To assist the retailers, the Branch distributed a program brochure in November 1991, providing retailers with information about the levy and the Sustainable Environment Fund (SEF). It is also in the process of developing a newsletter to improve communications with participants and the public. The Ministry will work with the Ministry of Finance and Corporate

How well informed were respondents about the "FIRST" program before Tire Talk?



How did respondents rank the effectiveness of the "FIRST" program before Tire Talk?



How effective were the presentations in helping respondents understand "FIRST"?

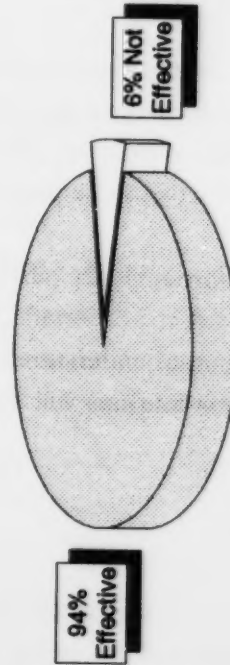


Figure 3

Relations to separately identify the environmental levies collected with the provincial sales tax.

- The absence of tire collectors and marshalling yards, especially in towns where the volume of scrap tires is small, was perceived to be the biggest drawback for tires entering the recycling stream. However, the collection sector is growing and the expected demand from processors should further stimulate collection sector growth. The Ministry also recognizes that it may have to provide assistance to local governments to help establish marshalling yards, or to reorganize the collection system to minimize the need for marshalling yards.
- The initial phase of the FIRST program was not designed to handle large tires because of the lack of processing technology. However, processing technology for large tires is becoming available sooner than expected. When more information on their transportation and processing costs, problems and opportunities is gathered an appropriate response will be developed to encourage large tire collection and recycling. This is also a priority research topic for the Recycling, Research, Development and Demonstration (R2D2) program, a \$1 million fund, administered by the B.C. Science Council.

ACTION PLAN

The following actions are recommended to address the issues discussed.

a) Communication Strategy

To maintain the momentum of information exchange that occurred between the Ministry and key participants during Tire Talk, a communication strategy is being developed that has the following components:

- **Newsletter** - The Branch is in the process of developing a newsletter to be sent to key participants. This newsletter will be used to address some of the questions about FIRST raised during the Tire Talk tour. The first issue

of the newsletter will be published in March 1992, in time for its distribution to coincide with the Globe '92 Conference (see below).

- **Mailing List** - The mailing list compiled during Tire Talk will be expanded and will be used in future large scale mail-outs to participants.
- **Globe '92** - Globe '92 is an International Conference on business and the environment to be held in Vancouver in March 1992. This will provide a unique opportunity to promote FIRST to the business community and the public.
- **Meet with Key Participants** - The Ministry plans in February 1992, to meet with key participants (e.g. retailers, haulers and marshalling yard operators) to foster continued communication amongst these participants as the program evolves.
- **B.C. Scrap Tire Advisory Committee** - More timely efforts will be made to solicit input from this committee about program developments.
- **Hotline Operators and Regional Staff** - The Ministry will provide hotline operators and regional staff with the most current information about the program so that they may facilitate the distribution of information to the public.

b) **Large Tires**

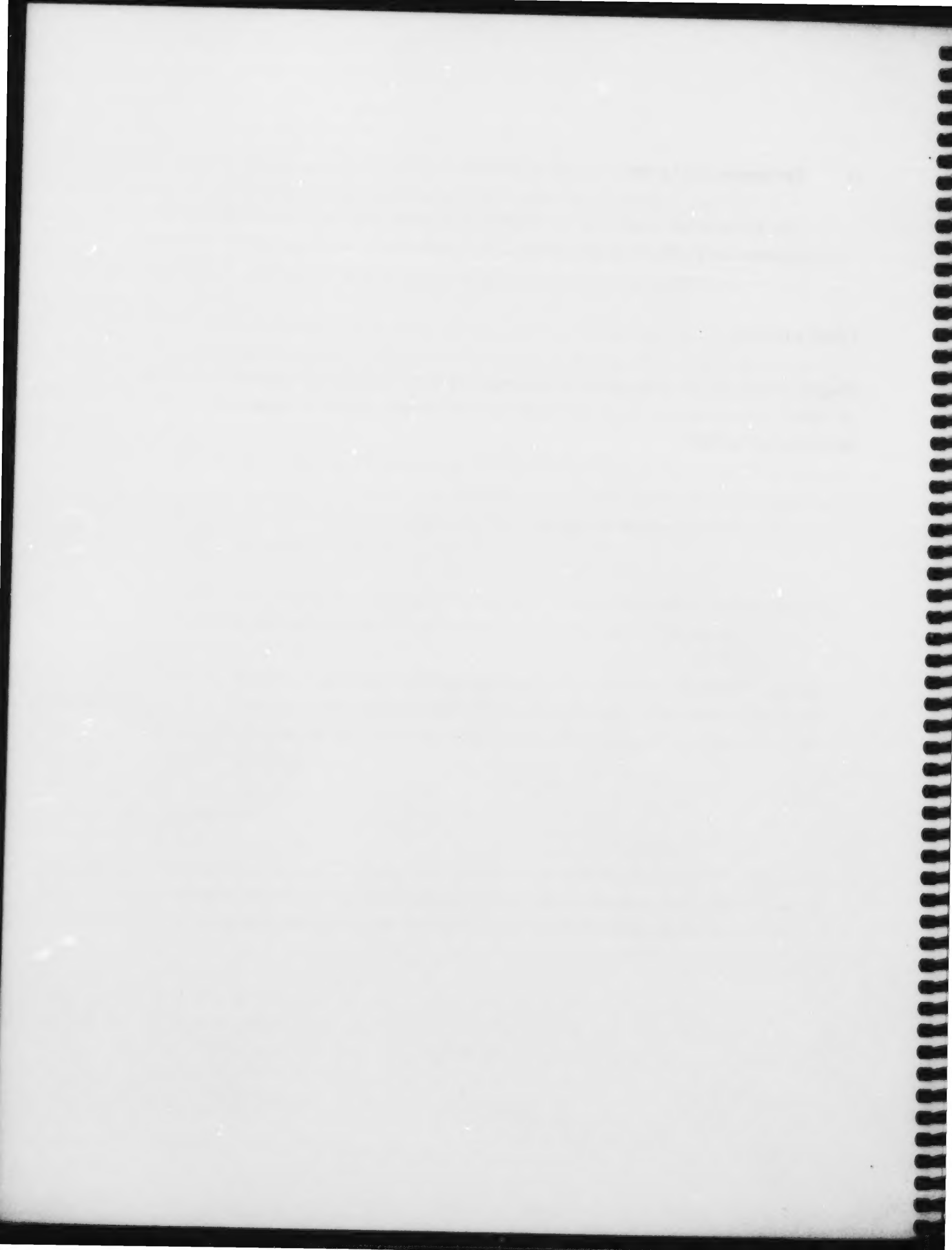
As processors start to accept and process large tires the Ministry will collect and analyze information on their transportation and processing. This will enable the development of appropriate adjustments to be made to the program.

c) **Environmental Levies**

The Ministry will work with the Ministry of Finance and Corporate Relations to separately identify the environmental levies collected with the provincial sales tax.

CONCLUSION

Overall, Tire Talk has been effective in raising the level of awareness and understanding of FIRST, identifying key issues that need to be addressed, and in bringing key participants together.



I INTRODUCTION

A. PURPOSE

The FIRST program was launched by the Municipal Waste Branch in June 1991 to address the problems with scrap tires in the province.

Soon after implementation it became apparent that the program was not well understood by the key participants such as tire retailers, haulers and auto dismantlers, who perceived problems with the program, despite the active participation of major industry sectors through the private sector Scrap Tire Advisory Committee, with the Ministry.

The Ministry concluded that the success of FIRST could be significantly enhanced and assured if the program's background, scope, objectives and approach were better understood by these participants.

The Tire Talk Project was initiated in September 1991 in response to a need for improved communication between all involved with the recycling of scrap tires.

B. APPROACH

The approach involved assembling a team to tour the province and conduct presentations to local governments as well as conducting separate presentations to tire generators and the public. In addition, a team of four people travelled throughout the province and personally visited or telephoned tire generators. Tire generators include retailers, auto dismantlers, stockpile generators and large commercial users.

The objectives of the tour were to:

- promote the program and educate people;
- to collect information about local government's and tire generator's perceptions, experiences, concerns and difficulties with the program. A tire generator questionnaire was developed, and used to record information about the participants' experiences before and after implementation of the program; and
- to provide key participants the opportunity to make suggestions for its improvement.

The goals for the Tire Talk team were to meet 310 tire generators and conduct at least 10 local government presentations by early December 1991.

This report summarizes the analyses of the questionnaire findings, and contains recommendations and action plans for the program's development and improvement. Other deliverables include a database of the questionnaire information and a mailing list to be used in future communications with program participants.

C. ACHIEVEMENTS

The project proceeded on time due to the combined efforts of Ministry staff, both in headquarters and the regions, and the Coopers & Lybrand Consulting Group. The Tire Talk team conducted 21 tire generator/public presentations, more than doubling the goal, and 13 local government presentations. Over 400 people attended the tire generator presentations and 95 attended the local government presentations.

A total 385 tire generator questionnaires were collected, exceeding our goal by almost 25%. In order to establish representation from all areas of the

province, questionnaires were completed by respondents from every regional district.

Another significant achievement was the effectiveness of the presentations and personal contacts. The questionnaire results tell us that before the tour, 42% of respondents considered themselves informed about the program. After the presentation, when asked how effective it had been in helping respondents understand the program, 94% of respondents reported that it had been effective in helping them to understand the program. This shows that the presentations and individual efforts by team members who personally contacted retailers, have been very successful in increasing the level of awareness and understanding of the program.

Another achievement was bringing together key participants during the presentations, and through discussion, developing a mutual understanding of each others concerns and difficulties with recycling scrap tires. In particular, it enhanced the quantity and quality of information exchanged between Ministry, C&L staff, participants and local governments. This has resulted in a better understanding of the goals and objectives of the program and the establishment of a cooperative spirit between Regional District staff and Ministry staff.

Overall, Tire Talk has been effective in increasing the level of awareness of the FIRST program and in identifying key issues that must be addressed for the program's continued success.

II ISSUES AND RESPONSES

The following issues were voiced by local government representatives, tire generators and the public during presentations and documented in the questionnaires. Not surprisingly, many of these issues were raised repeatedly throughout the province, and appear many times over in the questionnaires. Virtually all the issues raised were already known to the Ministry and in some cases the Ministry has been in the process of developing responses.

The issues below have been divided into 3 sections. The first identifies the issue and the concerns participants have. The second section discusses the issues and provides the Branch's view of the issue. The third section describes the Branch's response to the issue.

A. **\$3 LEVY**

Issue

The \$3 levy was placed on new tires with little consultation with the industry and far in advance of the FIRST program being implemented. This caused retailers to be frustrated as they were collecting and remitting the levy before the recycling infrastructure was in place to recycle scrap tires. Tires therefore continued to be landfilled. Other concerns include:

- the fact that the levy is GST applicable;
- retailers suffer the administrative burden of collecting and remitting the levy;
- retailers close to the border say that it forces customers to shop across the border; and
- retailers and the public do not know how much money is being collected or how the money is used.

Discussion

The introduction of the \$3 levy raised the public's awareness of the need to solve the scrap tire problems and provided the necessary funding to initiate FIRST.

The \$3 levy identified above caused some retailers to be hostile to the program and to the Ministry when it was first implemented. Subsequently it made it difficult to promote the program during presentations. The Ministry recognizes that the accounting and control mechanisms for collecting and reporting the \$3 levy are inadequate and contribute to retailers scepticism that the funds are not being used for their intended purpose. The levy was implemented by the Ministry of Finance before the program was developed and implemented.

Response

The Ministry will work with the Ministry of Finance and Corporate Relations to separately identify the environmental levies collected with the provincial sales tax.

To increase the level of understanding among tire generators about the program, the Ministry should collect accurate information on the funds raised and distribute this with information on the Sustainable Environment Fund (SEF) and the operation of the FIRST program.

The Ministry of Finance and Corporate Relations has made a submission to the Federal Government to remove the applicability of GST to the levy.

B. COLLECTION

Issue

The issue of tire collection throughout the province has a number of components.

- The absence of tire collection firms and the infrequency of tire pick ups, especially in the interior, were perceived to be one of the biggest drawbacks to tires entering the recycling stream. Many retailers said that if they are to recycle tires they need to have regular pick ups. For these reasons, many people said that the government should be responsible for collection.
- The viability of marshalling yards in areas of low population densities was questioned due to low tire volumes and the capital and liability costs of establishing a marshalling yard.
- Several transporters, especially those on Vancouver Island, have complained that the credit available to cover short distances does not cover the haulage costs and therefore there is no incentive to pick up tires from sources close to processors.
- Transporters have also complained that the fee they have to charge to pick up tires for recycling is perceived by retailers to be higher than the cost that retailers have paid to haul the tires themselves to a landfill. Therefore retailers have no incentive to direct these tires into the recycling stream.

Discussion

The program was designed to encourage the private sector to develop the collection infrastructure. Although the collection system has taken time to establish itself the number of collection companies is growing and the expected demand for tires from processors should further stimulate

collection sector growth. Tire transportation is working well in many areas of the province including the Lower Mainland, Southern Interior and Northern regions, especially where long haul rates apply and where processors are competing for tires.

The Ministry recognizes that in some areas local governments may have to assume the responsibility for operating a marshalling yard. To this end, the Ministry is prepared to provide assistance (including financial) to local governments.

The use of dedicated trucks to pick up tires was not anticipated or encouraged when the program began because the transportation credit was based on large trucks using back haul rates. A back haul rate is a reduced charge for a return trip that would otherwise be empty. However, backhaul rates are not available in some regions, and since the collection industry appears to be moving in the direction of using dedicated trucks, there is a need to revise the collection strategy to recognize the role of dedicated trucks as well as the need in some regions for marshalling yards of some kind.

The Branch recognizes that short haul rates may not be adequate to provide the incentive to transport tires short distances and adjustments to the credits structure are currently under consideration.

In some areas, such as Victoria, retailers remain reluctant to pay tipping fees to haulers, despite higher cost alternatives such as hauling tires themselves and paying landfill tipping fees. In some jurisdictions, retailers can still dispose of tires in landfills for free.

Response

Short haul rates will be examined to determine any necessary adjustments.

The Ministry will, in February 1992, meet with key participants including: retailers, transporters and marshalling yard operators to identify their needs

and concerns and to determine where the Ministry may need to intervene to ensure tires flow efficiently into the recycling system.

The Ministry expects the FIRST program will mature to the stage when tires become a valuable resource, in which case, market forces will cause tipping fees charged by haulers to be significantly lower or eliminated altogether.

Once the recycling alternative is firmly entrenched and the collection system has developed sufficiently, it is intended that provincial regulations will be enacted to ban the landfilling of tires. However, until that time, the Ministry is committed to putting an efficient tire collection system in place.

C. LARGE TIRES

Issue

Many people were concerned, especially in the interior, about when the program will start to deal with large tires (e.g. >16", skidder and off road tires).

Discussion

When the Ministry reviewed the proposals (upon which the FIRST program has been designed), the proposals provided information to deal only with passenger and light truck tires for which processing technology existed. Therefore the program and the credits were designed to deal only with tires up to 16". However, the Ministry always acknowledged that large tires would have to be dealt with in a subsequent phase of the program when more information was available on their processing and transportation costs.

Response

Due to rapidly developing processing technology, processors are beginning to accept and process large tires. Information on their transportation and

processing costs will be gathered and analyzed and an appropriate response will be developed to further encourage large tire collection, processing and recycling.

The Recycling, Research, Demonstration and Development Fund (R2D2) is available to support new recycling end users for scrap tires and new processing technologies, including large tire processing technology. The administrators of R2D2 have been directed by the Ministry to pay particular attention to proposals concerning large tire processing technology.

D. REGIONAL PROCESSORS

Issue

Some people, particularly in Northern regions, perceive that the FIRST program has an inherent bias against regional processors and end users in that short haul transportation credits are lower than long haul and there is no credit for transporting processed tire products to end users.

Discussion

The transportation credit was designed to ensure that tires generated anywhere in the Province could profitably be transported to processors. Shortly after the FIRST program began, the transportation credit rates for long hauls were increased to ensure that tires generated in the North could enter the collection stream. Since short haul rates are not as attractive, an unavoidable consequence of the policy is that it is more profitable to haul tires long distances than to a regional processor. However, processors have established in the Lower Mainland for sound economic reasons; tires are readily available in the large numbers that their machines require to be profitable, and there is generally closer access to end users.

The transportation credit is designed to encourage regional processors somewhat, in that the highest credit rate is for tires generated within 500 km of a processor.

Processors and/or end users have in fact located in the communities of Port Alberni, Cranbrook, and Salmon Arm. This indicates that under the right conditions, such firms can locate outside the Lower Mainland. One major determinant is the availability of tires, and thus a processor or end user of large tires is more likely to locate in the Interior where most large tires are generated.

Response

Business reasons and not the FIRST Program encourage the location of processing and end use facilities in the Lower Mainland. The Ministry will examine the effect of the level of transportation credits on the movement of scrap tires throughout the province and make any adjustments necessary to ensure the continued efficient movement of these tires.

As stated earlier, the R2D2 fund is available to help develop new processing technology which may make location decisions less critical.

E. COMMUNICATION

Issue

It has long been obvious from the questions coming in to the Ministry and the Hotline that retailers in particular were not reading/understanding the information package, including the Participants' Guide, which was sent to most tire generators and local governments in late May of 1991. Many people in fact complained that the package contained too much information.

Hot-line operators, regional district staff and government agents, although they received the participants guide, either did not read or did not adequately digest the additional instruction about the program and were therefore less well prepared than they could have been to help support the program when queried.

An innovation of the FIRST program was the creation of the B.C. Scrap Tire Advisory Committee (BCSTAC), which is made up of industry and Ministry representatives. The purpose of this committee is to review the program and to provide input to the Ministry on program modifications. However, despite the frequency of meetings, the untimeliness of issues arising during the development and implementation of the program provided too little opportunity for the Ministry and BCSTAC to adequately discuss program developments.

Discussion

The Ministry recognizes that the mail-out program could have been much more effective. It is clear in hindsight that the material was too comprehensive to be distributed all at once. This naturally discouraged many from reading it.

Some of the problems with the mail out program and communicating with key groups can be attributed to tight deadlines for designing, developing

and implementing the program and the need for confidentiality prior to approval by Cabinet.

The Tire Talk tour is considered to have been very successful in educating tire generators and the public about the program. Ninety four percent responded that the presentations had been effective in increasing their understanding of the FIRST program.

Response

The experience gained suggests that in developing and distributing future program guides, distributing smaller amounts of information at a time, and introducing the program at a suitable elementary level and working up to the necessary level of complexity would be more effective.

More timely efforts should be made to keep key groups informed and to solicit their input and advice in the development of key program areas. These groups include hot-line operators, regional staff and the B.C. Scrap Tire Advisory Committee.

Tire retailers and the public will be kept informed of program developments through the distribution of a newsletter that is currently under development and will be available in early 1992. This newsletter will include information about SEF and scrap tire recycling developments.

In addition, the GLOBE '92 conference will provide another forum through which information about the program can be distributed.

III ACTION PLAN

This section provides an action plan to address the issues raised in the previous chapter. Completing this plan will allow for information to be gathered upon which decisions about program adjustments can be made. It will also allow for information to be disseminated to key participants. Overall, this plan will contribute to the on-going success of the FIRST program.

A. **COMMUNICATION STRATEGY**

The Tire Talk tour was successful in promoting the FIRST program and in explaining its objectives and operation to key participants and the public. However, the tour must be considered as only one phase in the total amount of effort that must be expended to maintain and improve the program's profile among participants and the public. In addition, the Branch needs to maintain and build upon the communication channels that already exist. These channels will serve to both collect and disseminate information between the Branch and participants. To fulfil these requirements a communication strategy is being developed, and has the following components:

- **NEWSLETTER** - The Branch is already in the process of developing a newsletter for distribution to key participants on a regular basis. This newsletter, will be used to:
 - address some of the queries raised about the program during the tour such as, how much money is being collected by the tire levy and how this money spent is being used to operate the program efficiently;
 - explain program successes and program developments; and

- invite participants to submit their names and addresses to the Ministry so that the mailing list (see below) can be expanded and updated.

The Minister of Environment, Lands and Parks has been asked to write a forward for the newsletter.

The first issue of the newsletter will be published in March 1992, in time for its distribution to coincide with the Globe '92 Conference (see below).

- **MAILING LIST** - During Tire Talk nearly 400 names and addresses of tire generators were collected. This list will be combined with other suitable mailing lists, such as the Western Canada Tire Dealers and Re-treaders Association (WCTDRA) and will be used in future large scale mail-outs to participants.
- **GLOBE '92** - Globe '92 is an international and high profile conference, to be held in Vancouver in March 1992, on global opportunities for business and the environment (GLOBE). Participation at this conference will provide a unique opportunity for the Ministry to promote FIRST to businesses and governments provincially, nationally and internationally.

Enviro-Expo, the part of the conference open to the public, will provide an opportunity to promote FIRST to the public and also generate publicity for FIRST.

- **MEET WITH KEY PARTICIPANTS** - The Ministry plans, in February 1992, to meet with key participants (e.g. retailers, haulers and marshall yard operators) to foster continued communications and relationships amongst the participants and to determine where the Ministry may need to intervene to ensure tires flow efficiently into the recycling stream. Topics for discussion will include the

applicability of credits, especially when transporting tires short distances, and the involvement of local governments.

- **B.C. SCRAP TIRE ADVISORY COMMITTEE** - Due to the untimeliness of issues during the development and implementation of the program, the Ministry was not able to seek input from the B.C. Scrap Tire Advisory Committee as much as it would have liked. Efforts will be made to solicit input from this committee about program developments more regularly.
- **HOTLINE OPERATORS AND REGIONAL STAFF** - Hotline operators and regional staff play a key role in disseminating information about FIRST to the public. The Ministry, to fully utilize this service, will ensure that these groups have the most current information about the program so that they may facilitate its distribution to the public.

B. LARGE TIRES

Many people were concerned, especially in the interior, about when the program will start to deal with large tires. As processors begin accepting and processing large tires, the Ministry plans to collect and analyze information on their transportation and processing and develop appropriate adjustments to the program.

C. ENVIRONMENTAL LEVIES

The Ministry will work with the Ministry of Finance and Corporate Relations to identify the environmental levies collected with the provincial sales tax.

APPENDIX I

ANALYSIS OF QUESTIONNAIRE FINDINGS

QUESTIONNAIRE FINDINGS

The following analysis is based on the tabulation of responses to 385 tire generator questionnaires. The responses below are presented for the entire province, with the exception of questions VI, VII and IX, which have been further analyzed by four regions. The regions used are: Region 1, Vancouver Island; Region 2, Lower Mainland; Region 3, Southern Interior (which includes Ministry regions Southern Interior and Kootenay); and Region 4, Northern Interior (which includes Ministry regions Northern Interior and Skeena).

The analyses is divided into two sections. The first section contains the question (or an abbreviated form of the question) that was asked, and includes, in percentage form, the responses to the question. The second section contains a discussion of the results and contains, where necessary, the Ministry's response.

This appendix contains a copy of the questionnaire used. For evaluation purposes we have combined some of the responses to the questionnaire. Therefore, the question numbers below do not correspond exactly to the question numbers in the questionnaire.

It should be remembered that the responses to the Tire Talk questionnaires were collected after the FIRST program had been operating for only five months and that participants responses are likely to reflect their expectations that the program solve all their tire recycling problems from the first day of operation.

I TYPE OF RESPONDENTS

Result

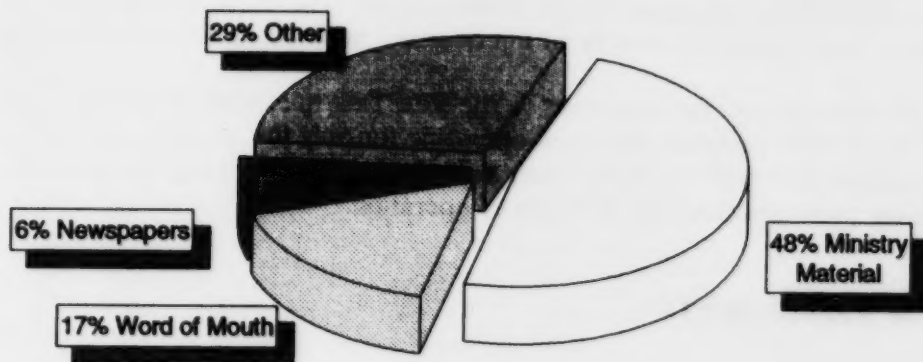
The largest group of respondents were tire retailers (84%), followed by auto dismantlers (10%).

Discussion

We estimate the number of retailers who returned completed questionnaires (324), represents between 25% and possibly up to 30% of the total number of tire retailers in the province.

FIGURE 4

How did you hear about the "FIRST" program?



II WHEN/HOW DID YOU HEAR ABOUT THE FIRST PROGRAM?

Result

82% heard of the FIRST program in 1991.

48% heard of the FIRST program from a Ministry brochure, 29% from other sources.

Discussion

Approximately half of the respondents first heard about the program this year, either from the B.C. Environment, Lands and Parks brochure or participants guide (although in this question the questionnaire did not make a distinction between the brochure and participants guide, both were mailed at approximately the same time). However, a significant minority heard about the program from other means such as retail associations and newsletters. (See Figure 4.)

III HOW WELL INFORMED ARE YOU ABOUT FIRST?

Result

Fifty eight percent reported that they were not informed about the program, 28% informed, and 14% said they were well informed.

Discussion

The majority of respondents said that they did not consider themselves informed about the program prior to the presentation or contact made by a Tire Talk team member. However, when respondents were asked after the presentation how effective it had been in explaining the program the responses were: 23% very effective, 71% effective and 6% not effective. This suggests that the presentations have been highly successful in increasing tire generators' knowledge about the program.

IV DID YOU RECEIVE A PARTICIPANTS GUIDE?

Result

60% had received a guide, 40% had not.

45% received and read the guide.

26% received, read and said it clearly explained the program.

Discussion

Before the program was implemented, approximately 4000 information packages were mailed to tire generators. These packages included information on FIRST as well as the Battery program if the retailer sold both. Clearly this resulted in information overload for some. The Branch recognizes that it was perhaps over zealous in trying to disseminate information and acknowledges it tended to err on the side of duplication rather than omission. The commercial mailing lists used contained several instances of duplicate records which compounded the problem for some recipients.

The results suggest, given the large number of people who did not receive the guide or who said it did not clearly explain the program, that in the future the Ministry should attempt to acquire more accurate mailing lists and that greater attention should be paid to reducing the quantity of information sent at a time, and improving the presentation and packaging to make it more "palatable" to a broad audience.

The 60% received may not be an accurate reflection of the number of participants guides successfully mailed. On several occasions when the Tire Talk team members visited retailers and asked this question the initial response was that the guide had not been received, but on further inspection by the retailer the participants guide was found, sometimes in an unopened envelope. Therefore we suspect that more participants guides had been successfully mailed than the results suggest, and that numerous retailers had not bothered to open and read the material. If this was and remains the case, then it goes some way to explain why many retailers raised basic questions about the program during presentations and why some are experiencing problems with the program. (See Question V below.)

V WHAT PROBLEMS ARE YOU EXPERIENCING WITH THE PROGRAM?

Result

Of the problems experienced with the program:

- 28% said they had no problems with the program.
- 6% said they had problems with completing forms.
- 31% said they had problems with customer response (to the \$3 levy); and
- 16% said they had problems with tipping fees.

178 additional comments were received, of these 53 (or 30%) said they "were not involved in the program", the remainder of the responses were highly varied, e.g. "need more tire pick up services" (5%), "where is the levy going" (4%), to "what about big tires" (3%).

Discussion

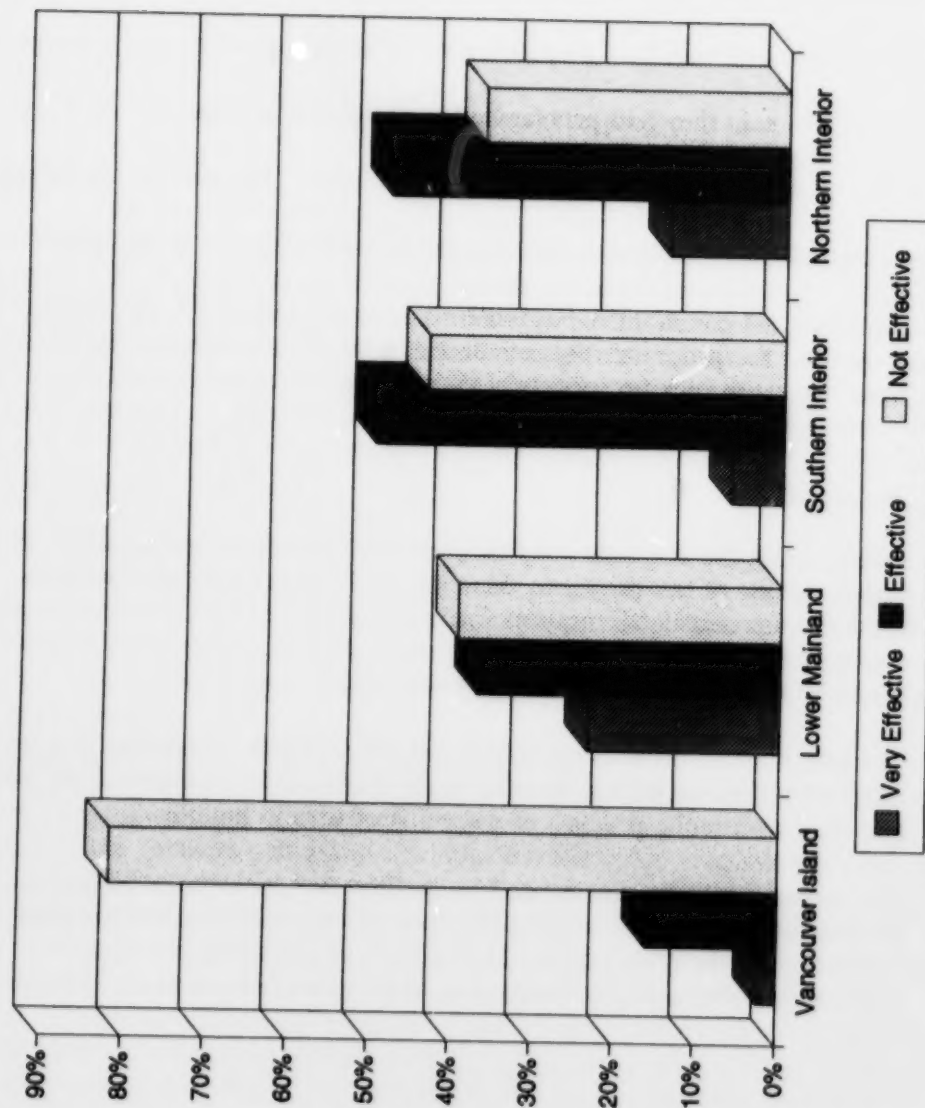
Judging from the responses to this question, the major problem was a lack of understanding of the program. Many of the questions raised during the presentations dealt with requests for basic information on how the program operates. Many people could have answered these questions themselves had they read the participants guide or telephoned the Hot-line.

The questionnaire results show that a significant portion had no problems with the program. This can mostly be attributed to their non involvement in the program and their continuing practice of disposing of tires in landfills.

The largest problem experienced by retailers was with the public's response to the \$3 levy (see page 9). Considerable time was spent during the presentations explaining the Levy and SEF. The process of informing retailers and the public will continue through the distribution of program brochures and a newsletter.

FIGURE 5

How do you rank the "FIRST" programme?



VI HOW DO YOU RANK FIRST AS AN EFFECTIVE SOLUTION TO THE SCRAP TIRE PROBLEM?

Result

Fourteen percent responded very effective, 42% effective and 45% not effective.

Again, there was a variety of comments when asked for suggestions for the improvements to the program. 210 responded with comments. The following are a sample of the more common comments:

- "Need tires to be picked up on a regular basis".
- "Require a local marshalling yard or drop off place to make the program work".
- "Public needs to be better informed about the program".
- "\$3 levy is very unpopular".

The chart opposite (Figure 5) shows how tire generators from each of the four regions responded.

82% of respondents from Vancouver Island said that FIRST was not an effective solution to the scrap tire problem.

Region 2, 3 and 4 reported not effective ratings of 40%, 44% and 37%. However, more positively, when the "very effective" and "effective" responses are combined the results for regions 2, 3 and 4 are 60%, 56% and 63% respectively.

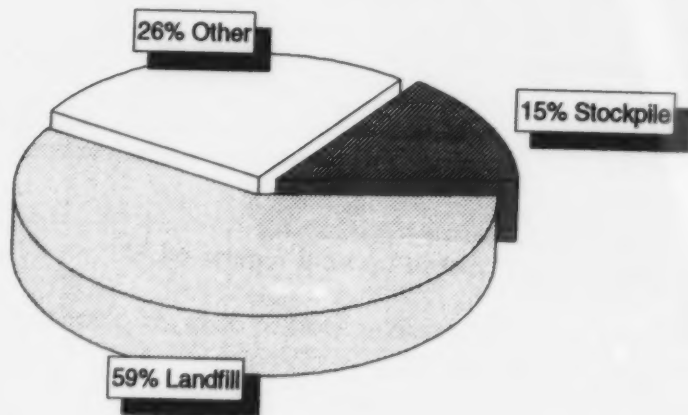
Discussion

The majority of tire retailers thought FIRST will be an effective solution to the scrap tire problem in B.C.

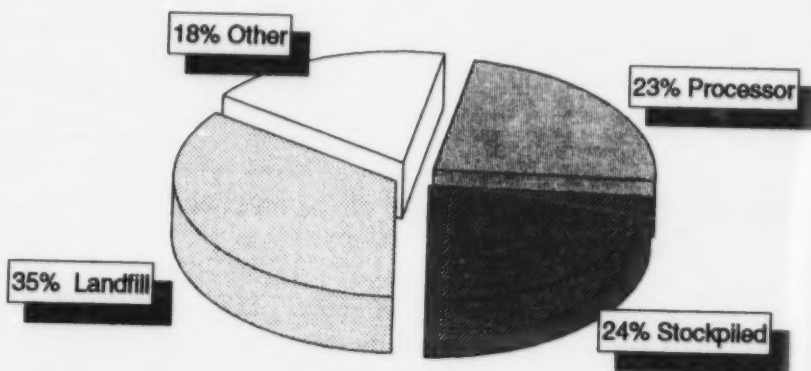
The Vancouver Island response (82% "not effective") can be attributed to the perception by retailers that the fee charged by transporters to pick up scrap tires for recycling is higher than the cost retailers pay for disposing tires in landfills (see page 12). In response to this issue the Ministry is reviewing the credit structure for transporting tires short distances. However, Regions 2, 3 and 4 considered FIRST to be an effective solution to the scrap tire problem.

FIGURE 6

Where did you send your scrap tires before "FIRST"?



Where do you currently send your scrap tires?



With regard to the comments received, the need for more regular tire pick up and the need for marshalling yards were problems known to the Ministry and it is planning in early 1992 to hold a series of discussions with the tire industry representatives, haulers and local governments to determine modifications to the program. The Ministry also recognizes that in some areas it may have to provide assistance for establishing marshalling yards.

VII BEFORE/AFTER THE PROGRAM WAS IMPLEMENTED WHERE DID YOU SEND YOUR TIRES?

Result

Before the program 59% sent tires to landfill, 15% to stockpiles, 26% other.

Since the program was implemented 35% sent tires to landfill, 24% stockpile (on own premises), 23% sent tires to processors or end users, 18% other (Figure 6).

When responses by each of the four regions are analyzed the results show that before FIRST was implemented the (Figure 7):

- Southern Interior and Northern Interior were disposing of 80% and 70% respectively of their scrap tires in landfills;
- Vancouver Island tire generators were stockpiling the majority of their tires at about 39%, closely followed by landfilling at 31%; and
- Lower Mainland tire generators were disposing of 40% of their tire in landfills which was closely followed by unspecified "other" at 36%.

Since the program was implemented (Figure 8):

- tire generators in the Southern Interior and Northern Interior still dispose of the largest proportions of their tires in landfills but the rates have declined to 46% and 41% respectively;
- stockpiling on Vancouver Island has increased slightly from 39% to 44%, while landfilling has declined from 31% to 27%; and
- tire generators in the Lower Mainland dispose of the majority of their tires to "other" at 29%.

FIGURE 7

Before "FIRST" where did you send your tires?

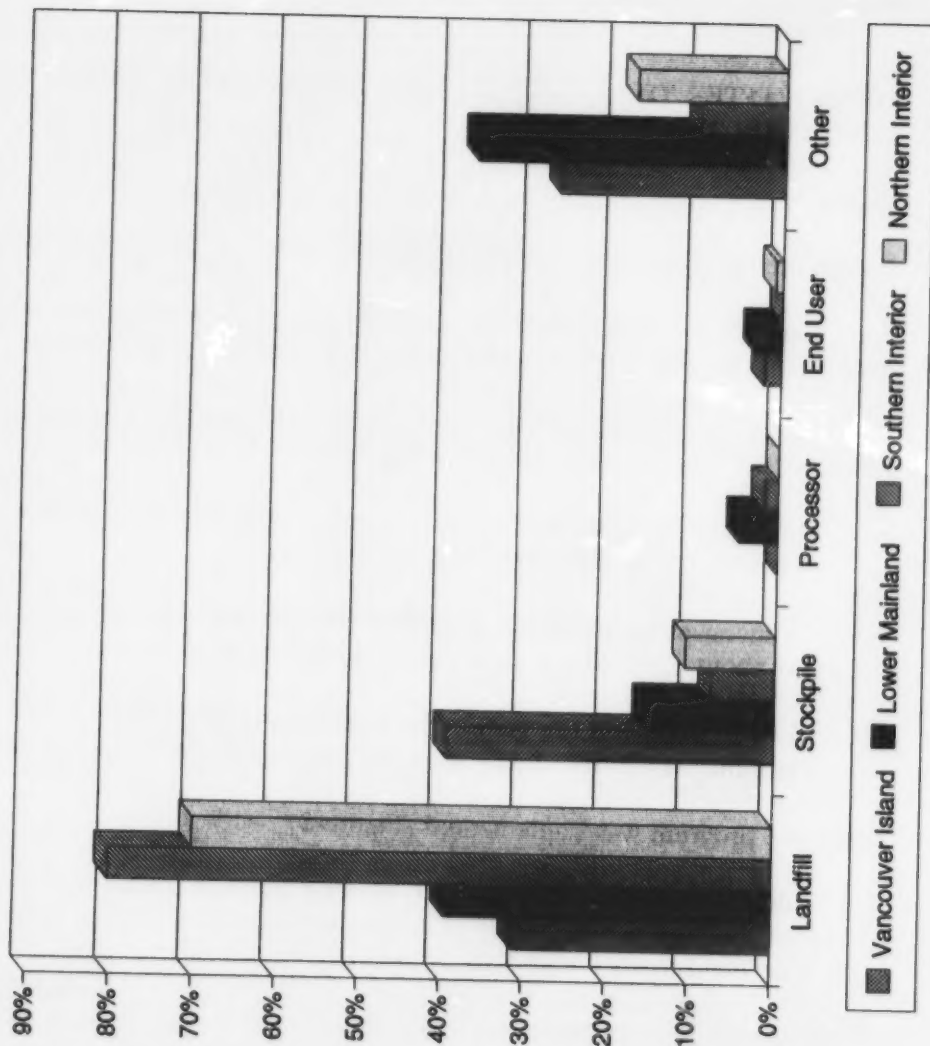


FIGURE 8

Where do you currently send your tires?

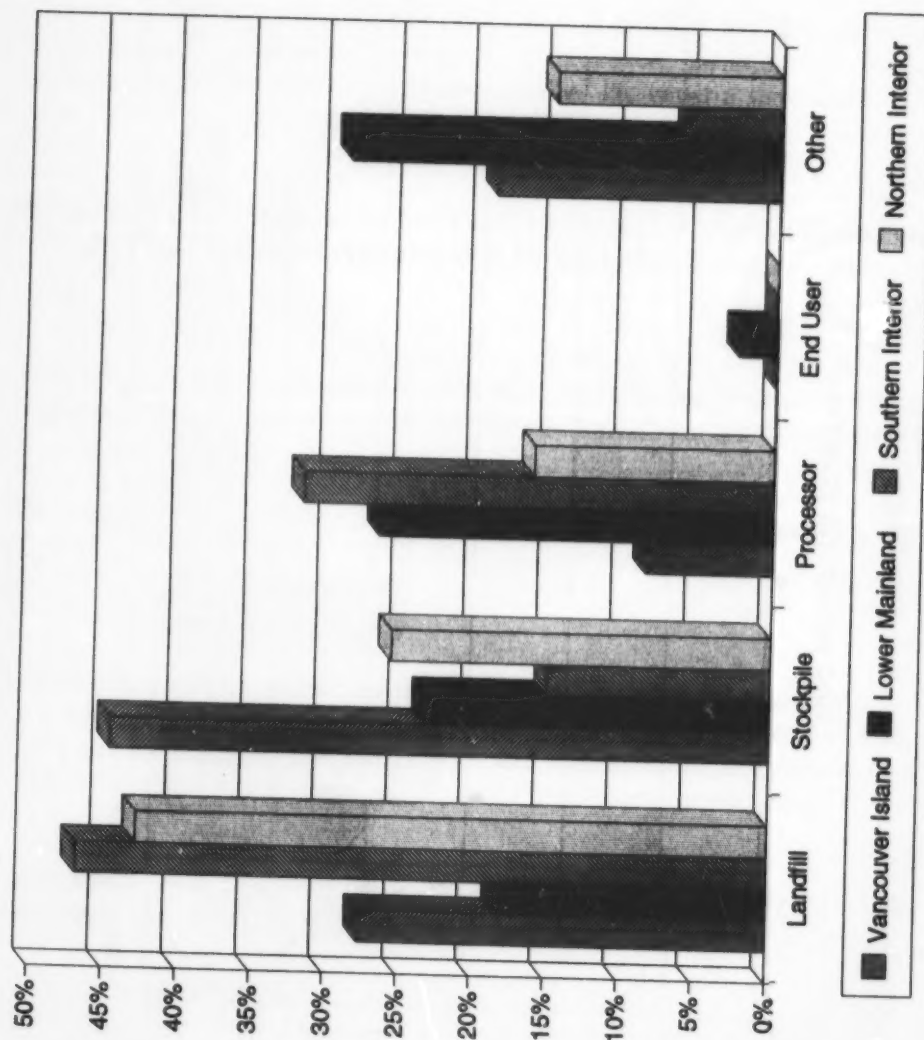
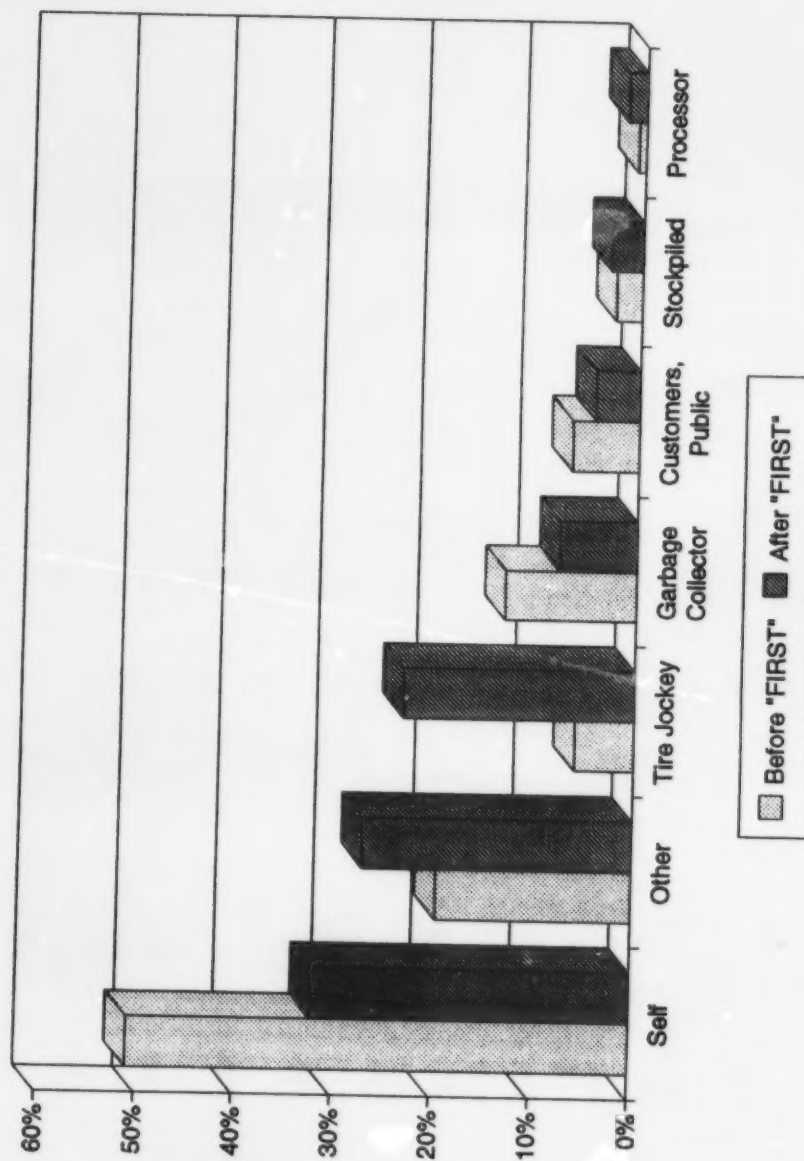


FIGURE 9

Who transports your tires?



For all regions the processor as a destination for tires has become significant and has risen from negligible amounts before FIRST to 8%, 26%, 31% and 16% for Regions 1 - 4 respectively.

Discussion

These figures show that the number of tires going to landfills has decreased while stockpiling, especially on retailers premises, has increased. Sending tires to processors or end users has increased substantially. However a significant proportion did not specify where tires are going.

VIII BEFORE/AFTER THE PROGRAM WAS IMPLEMENTED WHO TRANSPORTS YOUR TIRES (TO THE SITE IDENTIFIED IN QUESTION VII)?

Result

Before the program was implemented, 51% of tire generators transported scrap tires themselves, 19% were transported by "other" and 13% were transported by garbage collectors.

After the program was implemented, 32% of tire generators transported scrap tires followed by 27% "other" and 23% tire jockies (see Figure 9).

Discussion

Since the program was implemented the group that experienced the most significant decline in transporting tires were tire generators. This decline is almost matched by the increased role of tire jockies and indicates the importance of their role in collecting tires and transporting them to processors for recycling.

IX BEFORE/AFTER THE PROGRAM WAS IMPLEMENTED DID YOU PAY A TIPPING FEE? HOW MUCH?

Result

Before the program was implemented, 20% paid a tipping fee and 80% did not.

Since the program, 23% pay a tipping fee and 77% do not.

The tipping fees paid before and after the program in each of the 4 regions of the province are as follows:

Average Tipping Fees Before and After the program by Region

<u>Region</u>	<u>\$ Before</u>	<u>% Change</u>	<u>After</u>
1. Vancouver Island	0.18	122	0.40
2. Lower Mainland	0.62	-16	0.52
3. Southern Interior	0.18	-33	0.12
4. Norther Interior	<u>0.11</u>	<u>-27</u>	<u>0.08</u>
Weighted Mean	<u>0.43</u>	<u>- 9</u>	<u>0.39</u>

Discussion

The analysis of the tipping fees is based on 79 responses. Although several more respondents reported they paid tipping fees either before or after the program, we were unable to use these responses, since many reported they paid a fee by container, dump or bin load, etc. We were thus unable to determine the exact fee paid per tire.

Across the province the average fee paid before the program was implemented was \$0.43, this has fallen to \$0.39 after the program was implemented. Although this decline is small it can at least be partially attributed to increased competition for tires among transporters and the effect of a proportion of the transportation credit being passed on from processors to transporters.

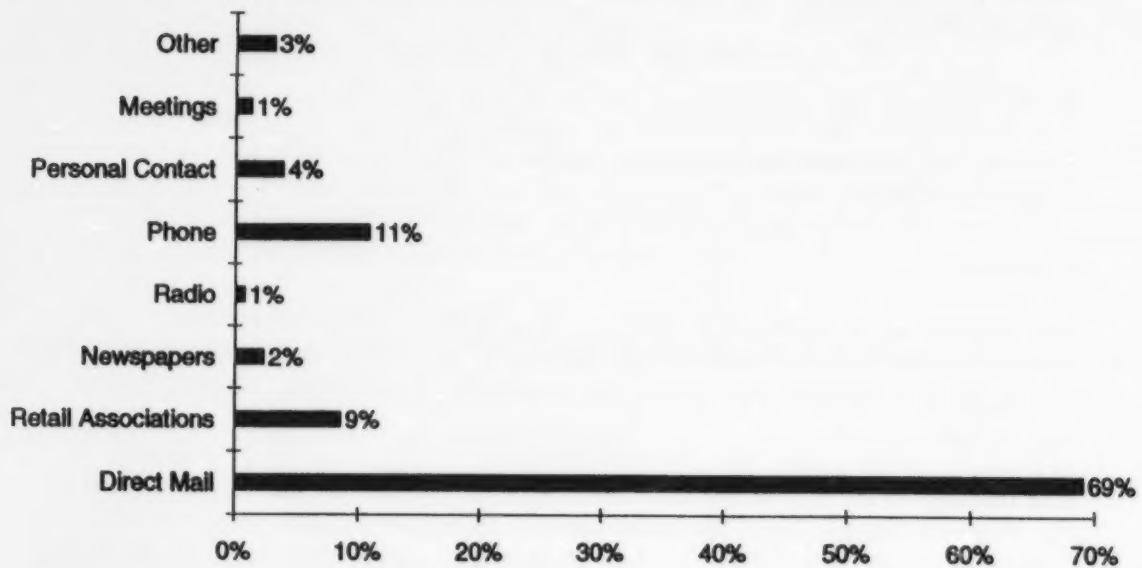
Overall the number of respondents paying a tipping fee since the program started has increased slightly, although the numbers are negligible, while the amount of tipping fee paid has fallen by a small amount.

The program has managed to divert a large number of tires into the recycling stream while having little impact so far on the number of retailers paying a tipping fee or the amount of the tipping fee paid.

Vancouver Island was the only region that experienced an increase in fees, from \$0.18 to \$0.4. The three remaining regions experienced a decline.

FIGURE 10

Best Method of Communication with Tire Generators



The largest fee paid before and after implementation is in the Lower Mainland. Its tipping fee declined from \$0.62 to \$0.52. The lowest fee before and after implementation is in the Northern Interior, its tipping fee declined from \$0.11 to \$0.08. This low fee reflects low or non-existent tipping charges made by landfill sites.

The Ministry anticipates that municipalities will start to increase landfill tipping fees in an effort to encourage people to recycle more and also to recover the cost of operating landfill sites. Recovering landfill operation costs will become increasingly important as municipalities look to generate revenue that can be used to purchase new landfill sites since 80% of these sites will be full by the year 2000. High landfill fees will encourage retailers to enter tires into the recycling stream.

X WHAT IS THE BEST WAY FOR THE MINISTRY TO COMMUNICATE WITH RETAILERS?

Result

The best way of communicating with retailers is direct mail 69%, followed by telephone 11%.

Discussion

The majority of tire generators prefer to be contacted and provided with information about the FIRST program by direct mail. The mailing list that will be developed as a result of this project will contribute to improved communication with tire generators.

The mailing list should be systematically expanded to include all interested parties, e.g. Western Canada Tire Distributors and Retailers (WCTDR) should be asked to include notice from FIRST, in their publication, asking readers to call Hot-line to get on newsletter mailing lists. (See Figure 10 opposite.)

XI HOW MANY PASSENGER AND LIGHT TRUCK TIRES HAVE YOU SOLD IN EACH OF THE LAST 3 YEARS?

Result

- Approximately half of the respondents declined to answer this question. We feel no valuable conclusions can be drawn as we suspect there is a high margin of error in the responses provided, as retailers consider it sensitive business information.

XII HOW EFFECTIVE HAS THIS PRESENTATION BEEN IN INCREASING YOUR UNDERSTANDING OF THE FIRST PROGRAM?

Result

23% very effective, 71% effective and 6% not effective.

Discussion

The efforts of the Tire Talk team in explaining the FIRST program to tire generators has therefore been highly successful and this approach should be considered for future, high profile initiatives.

XIII BREAKDOWN OF THE SOURCE OF THE QUESTIONNAIRES BY MINISTRY DISTRICT

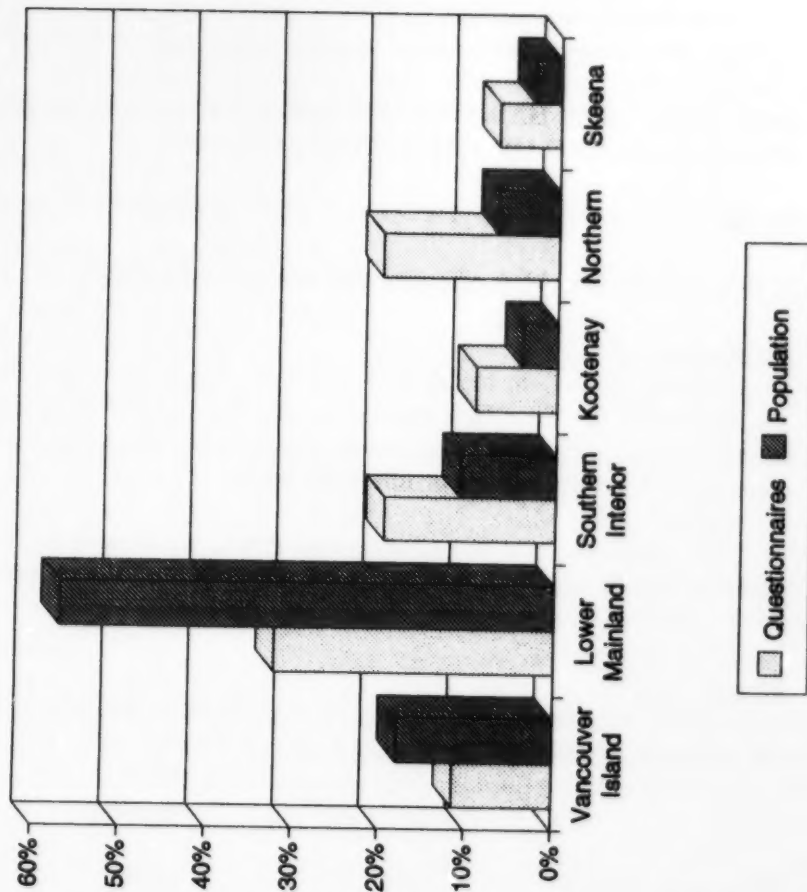
Result

Questionnaires received by Ministry district were:

	% Received	Population
Vancouver Island	12%	18%
Lower Mainland	32%	57%
Southern Interior	20%	11%
Kootenay	9%	4%
Northern Interior	20%	7%
Skeena	7%	3%

FIGURE 11

Tire Generator Questionnaires - by Ministry District



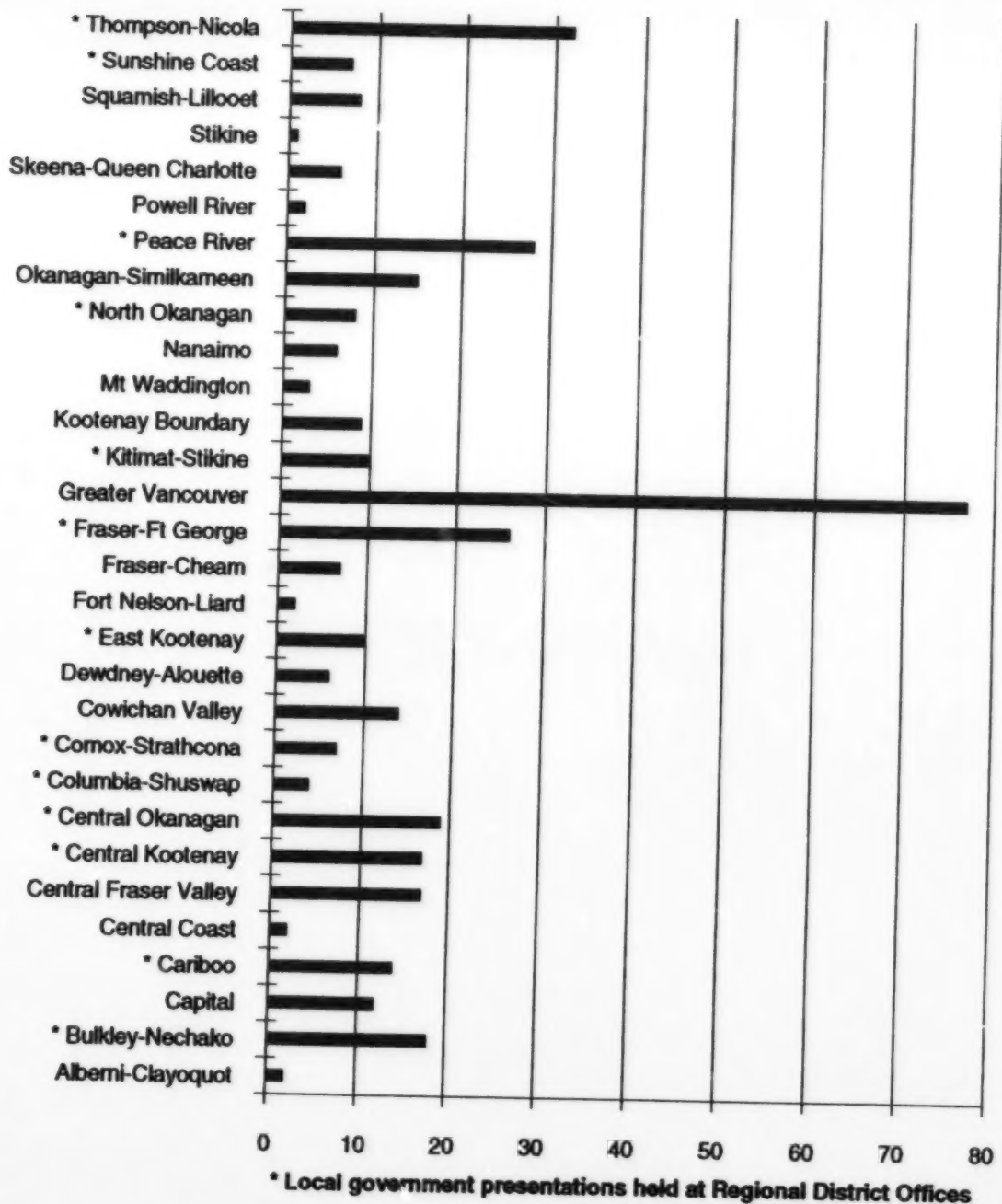
Discussion

Particular effort was made to visit specific problem areas identified in the first four months of operation. Consequently, some areas where the population is small (e.g. Skeena and Kootenay) have provided a disproportionately greater input than the large urban areas (e.g. Lower Mainland). (See Figure 11.)

Also, questionnaires were captured from respondents in every regional district. (See Figure 12 following.)

FIGURE 12

Number of Questionnaires Received - by Regional District



QUESTIONNAIRE

**BC ENVIRONMENT
FINANCIAL INCENTIVES TO RECYCLE SCRAP TIRES
"THE FIRST PROGRAM"**

TIRE GENERATOR QUESTIONNAIRE

Please provide the following information if you are a tire generator. Please print clearly.

1. GENERATOR INFORMATION

Company name: _____

Retailer: _____ Auto Dismantler: _____

Large Commercial User: _____ Other: _____

Your name: _____

Business address: _____

City: _____ Postal Code: _____

Telephone number: _____ Fax number: _____

Regional District: _____

2. a) WHEN DID YOU FIRST HEAR ABOUT THE "FIRST" PROGRAM?

Date (DD/MM/YY): _____

b) HOW DID YOU HEAR ABOUT THE FIRST PROGRAM? (Please check)

B.C. Environment Brochure: _____ Newspaper: _____

Word of Mouth: _____ Other: _____

c) HOW WELL INFORMED DO YOU THINK YOU ARE ABOUT THE FIRST PROGRAM, ARE YOU? (Please check)

Well informed _____ Informed _____ Not well informed _____

3. WITH REGARD TO THE PARTICIPANTS GUIDE:

Did you receive it Y/N? _____

Did you read it Y/N? _____

Did it explain the FIRST program clearly Y/N? _____

4. ARE YOU EXPERIENCING PROBLEMS WITH THE PROGRAM? (Please check)

Understanding the program _____

Completing forms _____

Customer/public response _____

Tipping fees _____

Other _____

Comments: _____

5. **HOW DO YOU RANK THE FIRST PROGRAM IN BEING AN EFFECTIVE SOLUTION TO THE SCRAP TIRE PROBLEM IN BC ? (Please check)**

Very Effective: _____ Effective: _____ Not Effective: _____

Comments: _____

6. **WHAT SUGGESTIONS DO YOU HAVE FOR ITS IMPROVEMENT ?**

Comments: _____

7. **BEFORE THE PROGRAM WAS IMPLEMENTED, WHERE DID YOU SEND YOUR TIRES? (Please check. The FIRST program began on June 1, 1991. A Processor turns tires into shreds, chips or crumb. An End User uses shreds, etc. for fuel or to manufacture a new product.)**

Landfill: _____ Private or Municipal _____ Stockpile _____

Processor (Please specify) _____

End user (Please specify) _____

Other (Please specify) _____

8. **BEFORE THE PROGRAM WAS IMPLEMENTED, WHO TRANSPORTED YOUR TIRES TO THE SITE IDENTIFIED IN QUESTION 7? (Please check.)**

Tire Jockey _____

Processor _____

Self _____

Other _____

9. a) **BEFORE FIRST WAS IMPLEMENTED, DID YOU PAY A TIPPING FEE, IF YES, HOW MUCH?**

Tipping Fee - Before FIRST \$ _____

- b) **DO YOU CURRENTLY PAY A TIPPING FEE, IF YES, HOW MUCH?**

Current Tipping Fee \$ _____

10. WHERE DO YOU CURRENTLY SEND YOUR TIRES? (Please check.)

Landfill - private _____ Location _____
- municipal _____ Location _____
Stockpile _____ Location _____
Processor (Please specify.) _____
End user (Please specify.) _____
Other _____

11. WHO CURRENTLY COLLECTS YOUR TIRES? (Please check.)

Tire Jockey _____ Name: _____
Processor _____ Name: _____
Self _____
Other _____

12. WHAT IS THE BEST METHOD FOR THE MINISTRY OF ENVIRONMENT TO COMMUNICATE WITH RETAILERS ABOUT THE FIRST PROGRAM? (Please check)

Direct Mail: _____ Retail Associations: _____ Newspapers: _____
Radio: _____ Other: _____

13. HOW MANY PASSENGER & LIGHT TRUCK TIRES HAVE YOU SOLD IN EACH OF THE LAST 3 YEARS? (Calendar year)

1989 _____ 1990 _____ 1991 (estimate) _____

14. NOW THAT YOU HAVE HAD AN OPPORTUNITY TO HEAR MORE ABOUT THE FIRST PROGRAM, HOW EFFECTIVE HAS THIS PRESENTATION BEEN IN INCREASING YOUR UNDERSTANDING OF THE OBJECTIVES & APPROACH OF THE PROGRAM?

Very Effective: _____ Effective: _____ Not Effective: _____

Comments: _____

Please feel free to add any additional comments on the back of this page. Thank-you for completing this Questionnaire.

COMPLETED BY: _____

DATE _____